PB85-213635

Superfund Record of Decision (EPA Region 1) Sylvester Site, Nashua, New Hampshire (Initial Remedial Measure), July 1982

(U.S.) Environmental Protection Agency
Washington, DC

29 Jul 82

U.S. Department of Commerce
National Technical Information Service
NTIS

TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

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EPA/ROD/RO1-82/005		PB85 213635 /AS

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SUPERFUND RECORD OF DECISION: Sylvester, NH (IRM)	07/29/82
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U. S. Environmental Protection Agency 401 "M" Street, S. W. Washington, D. C. 20460	Final ROD Report
	14. SPONSORING AGENCY CODE 800/00

15. SUPPLEMENTARY NOTES

16. ABSTRACT

The Gibson Road hazardous waste dump site is located in the City of Nashua, New Hampshire. The 6 acre site has been used as a sand borrow pit for an undetermined number of years. Some time during the late 1960's the operator of the pit began an unapproved and illegal waste disposal operation. Household refuse, demolition materials, chemical sludges, and approximately 800,000 gallons of hazardous liquid chemicals were dumped at the site. The ground water, air and to a lesser extent surface water have been contaminated.

The selected cost-effective remedial action includes the installation of a slurry wall around a 20-acre area, an impervious cap, and treatment of the ground water contained within the slurry wall. The present worth cost for the life of the project is estimated to be $8,660,000.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Record of Decision Site Name: Sylvester Site, NH Contaminated media: gw, sw, air Key Contaminants: volatile organics, inorganics, heavy metals		

18. DISTRIBUTION STATEMENT	19. SECURITY CLASS *(This Report)*	21. NO. OF PAGES
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	None	A 8.50

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United States
Environmental Protection
Agency

Office of
Emergency and
Remedial Response

EPA/ROD/R01-82/005
July 1982

PB85-213635

EPA

Superfund Record of Decision:

Sylvester Site, NH (IRM)

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 29 1982

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Record of Decision for the Sylvester Site, New Hampshire

FROM: William N. Hedeman, Jr., Director
Office of Emergency and Remedial Response (WH-548)

TO: Rita M. Lavelle, Assistant Administrator
Office of Solid Waste and Emergency Response (WH-562-A)

I forwarded a memorandum which you signed on June 21, 1982, which amended the Cooperative Agreement with the State of New Hampshire for the Sylvester Hazardous Waste Disposal Site. The amendment provided funds for extending the slurry wall and cap to a 20 acre area and funds to conduct a pilot study to optimize the ground water treatment system. This approach to the site was approved by Christopher Capper during a briefing by Mel Hohman, Region I Superfund Coordinator, on March 30, 1982.

Attached for your approval is a Record of Decision with accompanying briefing summaries and supporting documentation which were considered in the selection of the cost-effective remedial action for the Sylvester Site. If you feel the need for a briefing on the contents of the Record of Decision, I can do so at your convenience.

Attachment

Record of Decision
Remedial Alternative Selection

Site: Sylvester Site, Gilson Road, Nashua, New Hampshire

Analyses Reviewed:

I have reviewed the following documents describing the analysis of cost effectiveness of remedial alternatives at the Sylvester Site:

- Sylvester Hazardous Waste Dump Site Containment and Cleanup Assessment, Roy F. Weston, Inc., January 1982.
- Staff summaries and recommendations

Description of Selected Option:

- Installation of a slurry wall around a 20 acre area.
- Installation of a cap over the 20 acre area.
- Treatment of the ground water contained within the slurry wall.

Declarations:

Consistent with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), and the National Contingency Plan, I have determined that the containment and treatment strategy for the Sylvester site is a cost-effective remedy, and that it effectively mitigates and minimizes damage to, and provides adequate protection of public health, welfare and the environment. I have also determined that the action being taken is appropriate when balanced against the need to use Trust Fund money at other sites.

I have determined that the treatment of the contained contaminated ground water is necessary due to the uncertainties of the slurry wall and cap and other geological conditions of the site to adequately contain the contaminant plume. The proper evaluation and selection of the treatment system is being conducted by the State of New Hampshire under a cooperative agreement. I have determined that it is necessary to proceed with the installation of the slurry wall and cap concurrent with pilot studies for evaluating treatment processes. I will make a future decision on the necessary ground water treatment processes after the State has completed its technical analysis and evaluation.

Rita M. Lavelle
Assistant Administrator
Office of Solid Waste and Emergency Response

Sylvester Site Remedial Action
Briefing Document

- Purpose of this briefing is to obtain AA approval for the remedial action plan recommended by the Region and the State for the Sylvester Site. A "Record of Decision" has been prepared to document the approval.

- The Sylvester Site orginally was a six acre site that was used as a sand borrow pit for an undetermined number of years. In the late 1960's, household refuse, demolition materials, chemical sludges and hazardous liquid wastes were disposed of at the site at various times.

- It is estimated that the site had been used for hazardous waste disposal for approximately five years. During the period of January to October 1979, over 800,000 gallons of hazardous wastes have been documented as being disposed of at the site.

- Groundwater, air, and to a lesser extent, surface water contamination are of concern at the Sylvester Site. Public water supply transmission lines have and will continue to be extended to homeowners down-gradient of the site. Emergency (EPA) funds have been utilized to retard movement of the main contaminant plume to the Lyle Reed Brook and other down-gradient groundwater and surface water receptors (the Nashua River).

- Unrestricted surface release of groundwater contaminants (Lyle Reed Brook) would cause severe odor problems to adjacent residential areas.

- Roy F. Weston completed a feasibility study/remedial investigation in January, 1982, as required by the existing Cooperative Agreement. Five alternatives were considered in detail as follows:

Hydrologic Isolation (no containment)	$11,667,000
Treatment (35 GPM) with 20 acre slurry wall	8,839,000
Treatment (35 GPM) with 20 acre slurry wall & surface cap	9,012,000
Treatment (100 GPM) with 20 acre slurry wall & surface cap	8,660,000
Split System/Treatment (100 GPM) with 14 acre slurry wall & surface cap	12,303,000

The costs noted above include the present worth cost of both capital and O & M costs for the project life (varied with alternative). Each alternative was determined to effectively mitigate damage and provide adequate protection of public health, welfare, and the environment.

- A public meeting was held in Nashua on March 30, 1982. Approximately 150 people were in attendance. The State presented a summary of results and recommended remedial action to those in attendance for review and comment. While no substantial criticism regarding the remedial action plan was noted, the public was concerned about the timing of the clean-up and urged that the State initiate action as soon as possible. EPA transmitted to the public meeting concurrences regarding approval of the plan recently received from EPA Headquarters.

- Future public meetings are planned by the State as part of the Community Relations Plan to update concerned citizens regarding progress in the clean-up program.

- The State has taken the lead on enforcement actions regarding this site. Recently, a jury award of $14 million resulted from action in State court. It is highly unlikely, however, that defendants in this matter have assets available to satisfy the court decision. It is likely that property liens and other alternative cost-recovery strategies will, to the extent possible, be pursued.

- The recommended alternative includes the installation of a slurry wall containing 20 acres (the original 6 acres and adjacent areas to which groundwater contamination has spread) and an impervious cap. In addition, pending the results of pilot studies scheduled to begin during the summer, 1982, the design of groundwater treatment facilities will be completed. Careful review and evaluation of the pilot study data and recommendations will occur prior to the start of design. The State has agreed with this approach.

- The "Record of Decision" certifies that:

  - The selected remedial action is a cost-effective remedy for the site

  - The installation of the slurry wall and surface cap constitutes the first phase of the remedial action plan

  - The approval of necessary groundwater treatment processes will be made after the State has completed its technical analysis and evaluation

  - Monies are available in the Fund to finance the remedy

o The following actions are required to move the project into construction:

- Approve proposed remedy	AA, OSWER
- Complete slurry wall and cap design and complete/award construction contract	State
- Complete treatability studies	State
- Approve proposed treatment system and amend Cooperative Agreement	AA, OSWER
- Design treatment system	State
- Construct treatment system	State

REMEDIAL IMPLEMENTATION ALTERNATIVE SELECTION
SYLVESTER SITE
NASHUA, NEW HAMPSHIRE
JULY 15, 1982

HISTORY

The Gilson Road hazardous waste dump site is located in the City of Nashua, New Hampshire, off Route 111, in the south easterly corner of that community. See Attachment A for its location. The 6-acre site had been used as a sand borrow pit for an undetermined number of years. At some time during the late 1960's, after much of the sand had been removed from the property, the operator of the pit began an unapproved and illegal waste disposal operation, apparently intending to fill the excavation. Household refuse, demolition materials, chemical sludges, and hazardous liquid chemicals all were dumped at the site at various times. The household refuse and demolition material were usually buried, while the sludges and hazardous liquids were either mixed with the trash or, allowed to percolate into the ground adjacent to the old sand pit, or were stored in steel drums which were buried or placed on the ground surface.

The illegal activity at the site was first discovered in late 1970. After several court appearances and court actions, an injunction was issued in 1976 which ordered the removal of all material from the site. This injunction was ignored by the operator.

The first indication that hazardous wastes were also being dumped occurred in November 1978 when State personnel observed drums being stored at the site. A court order was issued in October 1979 prohibiting all further disposal of hazardous wastes on the site.

It is estimated that the site had been used for hazardous waste disposal for approximately 5 years. During the period from January to October 1979, over 800,000 gallons of hazardous wastes have been documented as being disposed of at this site. With the dump having been used for about five years, the total volume of waste which has been disposed of there is likely substantial.

Clean-up activities began as soon as legal access to the property could be obtained.

In the period of May - June 1980, the 1314 drums, which were accessible were removed by a contractor and disposed of at approved sites in New York and Ohio.

Groundwater testing and monitoring was performed and in July 1981, a report investigated the extent of the contamination problem and determined that there were high concentrations of heavy metals and volatile and extractable organics

in the groundwater under the site. The contaminated groundwater formed a plume which was moving from site toward Lyle Reed Brook at the rate of 0.8 to 1.6 feet per day.

CURRENT STATUS

Contaminant migration exists in groundwater and air, and, to a lesser extent, surface water. Monitoring of groundwater and air will continue during the EPA emergency action (groundwater recirculation) to determine movement/migration of contaminants. Surface water discharge to the Lyle Reed Brook from contaminated groundwater could, if uncontrolled, have the dual effect of surface water degradation with anoxic conditions and odors generated from volotile organic compounds. Potential discharge of contaminants to the Nashua River constitutes a secondary effect from the site.

The groundwater recirculation system is a temporary means of retarding movement of the contaminant plume. The implementation of the remedial action will constitute the permanent long-term remedy.

The feasibility study published by Roy F. Weston, Inc. in January, 1982, identified five alternatives for remedial action at the Sylvester Site as follows:

Hydraulic Insolation (no containment)	$11,667,000*
Treatment (100 GPM) with 20 acre slurry wall	8,839,000*
Treatment (35 GPM) with slurry wall and surface cap	9,012,000*
Treatment (100 GPM) with 20 acre slurry wall & surface cap	8,660,000*
Split System/Treatment (100 GPM) with 14 acre slurry wall and surface cap	12,303,000*

*(Present worth cost for capital and O & M costs for life of the project)

Each of the alternatives summarized above would effectively mitigate damage and provide adequate protection of public health, welfare, and the environment.

On March 30, 1982, at a public hearing in Nashua, New Hampshire, the findings and recommendations of the Weston Report were presented by the State of New Hampshire. While no definitive criticism of the remedial action plan was raised, the public urged implementation of the clean-up plan as soon as possible.

EPA representatives transmitted to the public verbal concurrences regarding approval of the clean-up plan recently received from EPA Headquarters.

Prior to the public meeting, a presentation of the findings of the Weston Report was made to EPA Headquarters with opportunities for comment and revisions to the report by the State. Approval of the remedial action plan was made by Acting AA, OSWER, prior to public meeting. The Region had previously reviewed and submitted comments to the State regarding the study. Based on a review of all available data, findings, recommendations of current and earlier technical studies, the Region recommended approval of the proposed remedial action plan.

RECOMMENDED ALTERNATIVE

Section 300.67(j) of the National Contingency Plan states that the appropriate extent of remedy shall be determined by the lead agency's selection of the remedial alternative which the agency determines is cost-effective (i.e., the lowest cost alternative that is technologically feasible and reliable) and which effectively mitigates and minimizes damage to and provides adequate protection of public health, welfare, or the environment. Based on our evaluation of the cost-effectiveness of each of the proposed alternatives, the comments received from the public, information from earlier technical studies, and information from the State, we have determined that the On-Site Containment/Treatment strategy identified in the feasibility study meets the NCP criteria.

The remedial action plan selected includes the installation of a 20 acre slurry wall and surface cap with treatment of groundwater (100 GPM) for approximately 6.2 years. Total capital costs are shown in Attachment B. Current estimates for annual O & M costs are $750,000. However, one of the primary concerns to be addressed during pilot studies will be the reduction of operating costs for a groundwater treatment facility.

PROPOSED ACTION

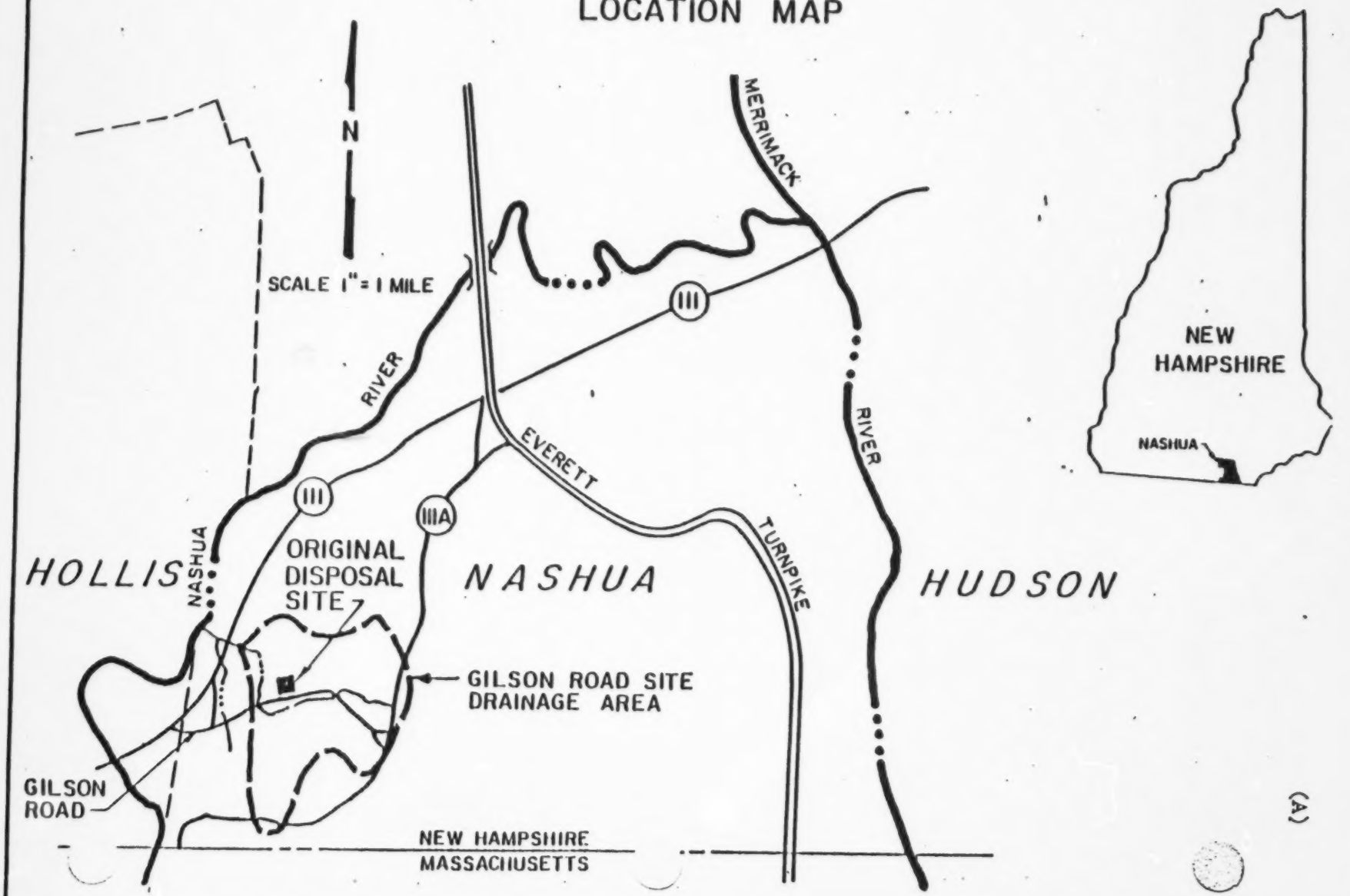
We request your approval of the 20-acre slurry wall and surface cap and groundwater treatment as the remedial implementation option for the Slyvester Site. Attachments B - H provide additional information to support the documentation for this decision.

TENTATIVE SCHEDULE

Advertise and receive bids	By the State during July, 1982

FIGURE 2-1

LOCATION MAP



Award contract and begin construction of slurry wall and surface cap	Following bid receipt, tabulation and recommendation of award to low, responsive, responsible bidder
Public meeting	During late summer of fall, 1982, by State of New Hampshire

If you have any questions, please call John F. Zipeto at 223-3468.

Attachments: As noted

TABLE 10-1

ESTIMATED CONSTRUCTION COSTS
GROUNDWATER CONTAINMENT AND TREATMENT FACILITIES
GILSON ROAD HAZARDOUS WASTE DUMP SITE

Item	Estimated Costs
Goundwater Containment	
1. Slurry Wall	$ 2,100,000
2. Surface Cap	436,000
3. Recovery Wells	50,000
4. Gas Ventings System	65,000
Subtotal	$ 2,651,000
5. Engineering and Contingencies (25%)	662,500
6. Land Acquisition	28,500
Total Containment Cost	$ 3,342,000
Groundwater Treatment	
1. Construction of Treatment Building and Utilities	$ 462,000
2. Chemical Precipitation and Neutralization	306,300
3. Steam Stripping and Incineration	234,500
4. Aerated Lagoons and Effluent	274,600
5. Electrical, Instrumentation, Piping and HVAC	366,700
6. Subtotal	1,644,100
7. Engineering and Contingency (30%)	493,900
Total Treatment Cost	$ 2,138,000
Total Containment and Treatment Cost	$ 5,480.000

11

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

UNCONTROLLED WASTE SITES
AIR & HAZARDOUS MATERIALS DIV.
(C)
SEP - 3 1981

DATE: August 27, 1981

SUBJECT: Request for Exemption Under 40 CFR 1506.11 - Sylvester Hazardous Waste Site, Nashua, New Hampshire

FROM: Wallace E. Stickney, P.E., Director
Environmental Impact Office, Region I

TO: William N. Hedeman, Jr., Director
Office of Federal Activities (A-104)

Region I is requesting an exemption from the requirements of the National Environmental Policy Act (NEPA) under 40 CFR 1506.11 (Emergencies) and EPA's NEPA Rules and Regulations under 6.106 for the abatement of existing public health hazards at the Sylvester Hazardous Waste Site in Nashua, New Hampshire.

The site, which has been under study for some time, is located near a residential area including a near by trailer park. Residents from the area and state authorities are concerned about airborne health hazards, possible explosions and fire.

The site itself is an abandoned gravel pit where the waste has been dumped over a ten year period. The site has been fenced off and ten observation wells were installed to test for groundwater contamination. Results from samples show high levels of organic chemicals, iron and manganese in a plume traveling about one foot per day towards Lyle Reed Brook, which boarders the trailer park.

EPA and the State of New Hampshire have recently signed a cooperative agreement to implement the construction of treatment facilities on the site. Construction is expected to begin within several months.

Since the design of the remedial facilities is nearly completed, Region I believes that the application of NEPA would cause significant delay in an already existing emergency situation. Therefore, we request the exemption under the above referenced provisions of the CEQ and EPA NEPA Regulations.

I would appreciate your quick response to our request.

cc: Michael Cook, Director
Office of Emergency and Remedial Response
Doug Cohen (WH-548)
Office of Emergency and Remedial Response
John Backler
EPA, Region I
Mike Donohue,
NH Water Supply & Pollution Control

EPA Form 1320-6 (Rev. 3-76)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 29 1982

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Record of Decision for the Sylvester Site, New Hampshire

FROM: William N. Hedeman, Jr., Director *Hedeman for*
Office of Emergency and Remedial Response (WH-548)

TO: Rita M. Lavelle, Assistant Administrator
Office of Solid Waste and Emergency Response (WH-562-A)

I forwarded a memorandum which you signed on June 21, 1982, which amended the Cooperative Agreement with the State of New Hampshire for the Sylvester Hazardous Waste Disposal Site. The amendment provided funds for extending the slurry wall and cap to a 20 acre area and funds to conduct a pilot study to optimize the ground water treatment system. This approach to the site was approved by Christopher Capper during a briefing by Mel Hohman, Region I Superfund Coordinator, on March 30, 1982.

Attached for your approval is a Record of Decision with accompanying briefing summaries and supporting documentation which were considered in the selection of the cost-effective remedial action for the Sylvester Site. If you feel the need for a briefing on the contents of the Record of Decision, I can do so at your convenience.

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Record of Decision
Remedial Alternative Selection

Site: Sylvester Site, Gilson Road, Nashua, New Hampshire

Analyses Reviewed:

I have reviewed the following documents describing the analysis of cost effectiveness of remedial alternatives at the Sylvester Site:

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- Treatment of the ground water contained within the slurry wall.

Declarations:

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Rita M. Lavelle
Assistant Administrator
Office of Solid Waste and Emergency Response

Sylvester Site Remedial Action Briefing Document

- Purpose of this briefing is to obtain AA approval for the remedial action plan recommended by the Region and the State for the Sylvester Site. A "Record of Decision" has been prepared to document the approval.

- The Sylvester Site orginally was a six acre site that was used as a sand borrow pit for an undetermined number of years. In the late 1960's, household refuse, demolition materials, chemical sludges and hazardous liquid wastes were disposed of at the site at various times.

- It is estimated that the site had been used for hazardous waste disposal for approximately five years. During the period of January to October 1979, over 800,000 gallons of hazardous wastes have been documented as being disposed of at the site.

- Groundwater, air, and to a lesser extent, surface water contamination are of concern at the Sylvester Site. Public water supply transmission lines have and will continue to be extended to homeowners down-gradient of the site. Emergency (EPA) funds have been utilized to retard movement of the main contaminant plume to the Lyle Reed Brook and other down-gradient groundwater and surface water receptors (the Nashua River).

- Unrestricted surface release of groundwater contaminants (Lyle Reed Brook) would cause severe odor problems to adjacent residential areas.

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The costs noted above include the present worth cost of both capital and O & M costs for the project life (varied with alternative). Each alternative was determined to effectively mitigate damage and provide adequate protection of public health, welfare, and the environment.

- A public meeting was held in Nashua on March 30, 1982. Approximately 150 people were in attendance. The State presented a summary of results and recommended remedial action to those in attendance for review and comment. While no substantial criticism regarding the remedial action plan was noted, the public was concerned about the timing of the clean-up and urged that the State initiate action as soon as possible. EPA transmitted to the public meeting concurrences regarding approval of the plan recently received from EPA Headquarters.

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- The "Record of Decision" certifies that:

  - The selected remedial action is a cost-effective remedy for the site

  - The installation of the slurry wall and surface cap constitutes the first phase of the remedial action plan

  - The approval of necessary groundwater treatment processes will be made after the State has completed its technical analysis and evaluation

  - Monies are available in the Fund to finance the remedy

o The following actions are required to move the project into construction:

- Approve proposed remedy	AA, OSWER
- Complete slurry wall and cap design and complete/award construction contract	State
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- Approve proposed treatment system and amend Cooperative Agreement	AA, OSWER
- Design treatment system	State
- Construct treatment system	State

MEDIAL IMPLEMENTATION ALTERNATIVE SELECTION
SYLVESTER SITE
NASHUA, NEW HAMPSHIRE
JULY 15, 1982

HISTORY

The Gilson Road hazardous waste dump site is located in the City of Nashua, New Hampshire, off Route 111, in the south easterly corner of that community. See Attachment A for its location. The 6-acre site had been used as a sand borrow pit for an undetermined number of years. At some time during the late 1960's, after much of the sand had been removed from the property, the operator of the pit began an unapproved and illegal waste disposal operation, apparently intending to fill the excavation. Household refuse, demolition materials, chemical sludges, and hazardous liquid chemicals all were dumped at the site at various times. The household refuse and demolition material were usually buried, while the sludges and hazardous liquids were either mixed with the trash or, allowed to percolate into the ground adjacent to the old sand pit, or were stored in steel drums which were buried or placed on the ground surface.

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It is estimated that the site had been used for hazardous waste disposal for approximately 5 years. During the period from January to October 1979, over 800,000 gallons of hazardous wastes have been documented as being disposed of at this site. With the dump having been used for about five years, the total volume of waste which has been disposed of there is likely substantial.

Clean-up activities began as soon as legal access to the property could be obtained.

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Groundwater testing and monitoring was performed and in July 1981, a report investigated the extent of the contamination problem and determined that there were high concentrations of heavy metals and volatile and extractable organics

in the groundwater under the site. The contaminated groundwater formed a plume which was moving from site toward Lyle Reed Brook at the rate of 0.8 to 1.6 feet per day.

CURRENT STATUS

Contaminant migration exists in groundwater and air, and, to a lesser extent, surface water. Monitoring of groundwater and air will continue during the EPA emergency action (groundwater recirculation) to determine movement/migration of contaminants. Surface water discharge to the Lyle Reed Brook from contaminated groundwater could, if uncontrolled, have the dual effect of surface water degradation with anoxic conditions and odors generated from volotile organic compounds. Potential discharge of contaminants to the Nashua River constitutes a secondary effect from the site.

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*(Present worth cost for capital and O & M costs for life of the project)

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EPA representatives transmitted to the public verbal concurrences regarding approval of the clean up plan recently received from EPA Headquarters.

Prior to the public meeting, a presentation of the findings of the Weston Report was made to EPA Headquarters with opportunities for comment and revisions to the report by the State. Approval of the remedial action plan was made by Acting AA, OSWER, prior to public meeting. The Region had previously reviewed and submitted comments to the State regarding the study. Based on a review of all available data, findings, recommendations of current and earlier technical studies, the Region recommended approval of the proposed remedial action plan.

RECOMMENDED ALTERNATIVE

Section 300.67(j) of the National Contingency Plan states that the appropriate extent of remedy shall be determined by the lead agency's selection of the remedial alternative which the agency determines is cost-effective (i.e., the lowest cost alternative that is technologically feasible and reliable) and which effectively mitigates and minimizes damage to and provides adequate protection of public health, welfare, or the environment. Based on our evaluation of the cost-effectiveness of each of the proposed alternatives, the comments received from the public, information from earlier technical studies, and information from the State, we have determined that the On-Site Containment/Treatment strategy identified in the feasibility study meets the NCP criteria.

The remedial action plan selected includes the installation of a 20 acre slurry wall and surface cap with treatment of groundwater (100 GPM) for approximately 6.2 years. Total capital costs are shown in Attachment B. Current estimates for annual O & M costs are $750,000. However, one of the primary concerns to be addressed during pilot studies will be the reduction of operating costs for a groundwater treatment facility.

PROPOSED ACTION

We request your approval of the 20-acre slurry wall and surface cap and groundwater treatment as the remedial implementation option for the Slyvester Site. Attachments B - H provide additional information to support the documentation for this decision.

TENTATIVE SCHEDULE

Advertise and receive bids	By the State during July, 1982

Award contract and b( )n construction of slurry wall and surface cap	Followi) bid receipt, tabulation and recommendation of award to low, responsive, responsible bidder
Public meeting	During late summer of fall, 1982, by State of New Hampshire

If you have any questions, please call John F. Zipeto at 223-3468.

Attachments: As noted

FIGURE 2-1

LOCATION MAP

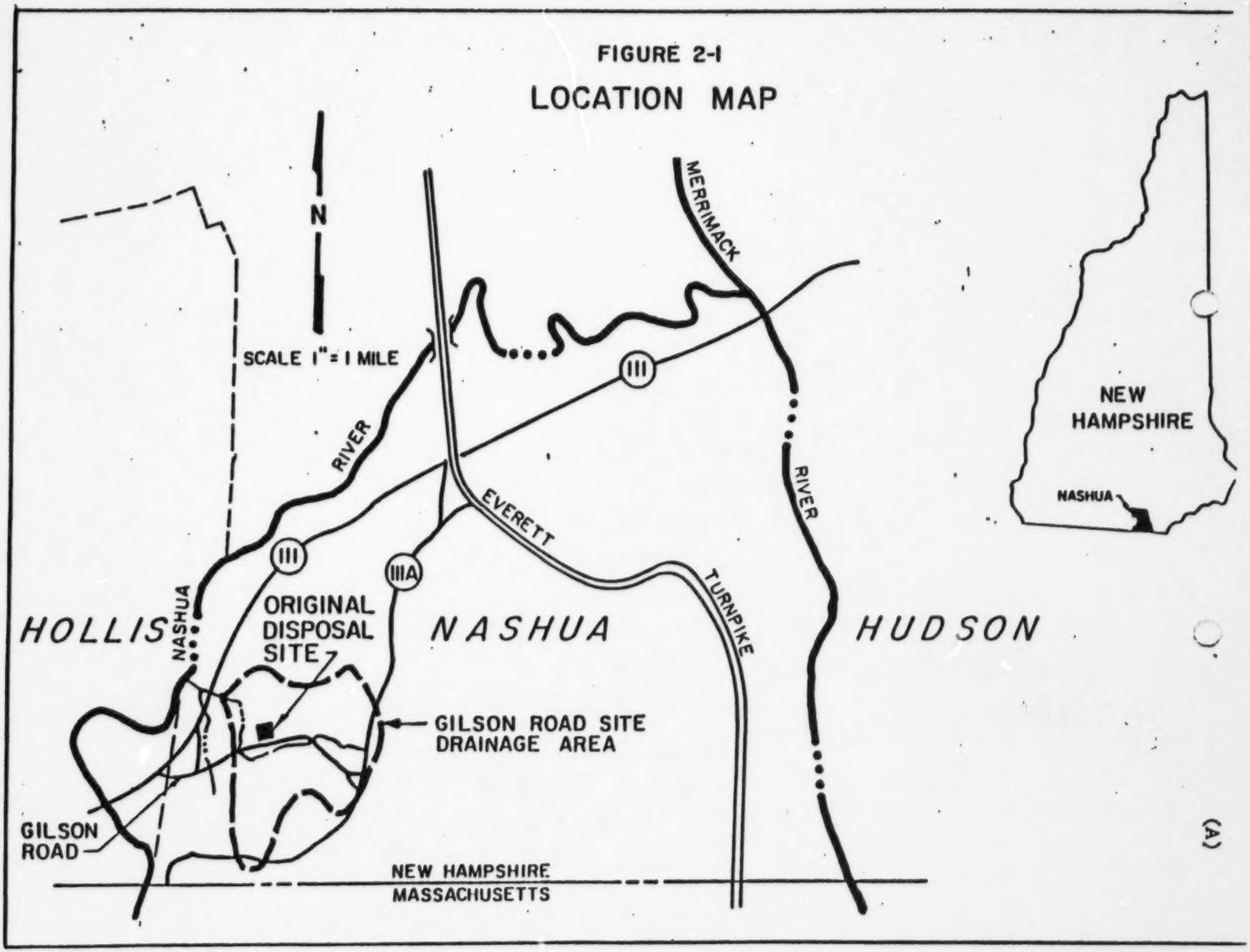

TABLE 10-1

ESTIMATED CONSTRUCTION COSTS
GROUNDWATER CONTAINMENT AND TREATMENT FACILITIES
GILSON ROAD HAZARDOUS WASTE DUMP SITE

Item	Estimated Costs
Goundwater Containment	
1. Slurry Wall	$ 2,100,000
2. Surface Cap	436,000
3. Recovery Wells	50,000
4. Gas Ventings System	65,000
Subtotal	$ 2,651,000
5. Engineering and Contingencies (25%)	662,500
6. Land Acquisition	28,500
Total Containment Cost	$ 3,342,000
Groundwater Treatment	
1. Construction of Treatment Building and Utilities	$ 462,000
2. Chemical Precipitation and Neutralization	306,300
3. Steam Stripping and Incineration	234,500
4. Aerated Lagoons and Effluent	274,600
5. Electrical, Instrumentation, Piping and HVAC	366,700
6. Subtotal	1,644,100
7. Engineering and Contingency (30%)	493,900
Total Treatment Cost	$ 2,138,000
Total Containment and Treatment Cost	$ 5,480.000

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

UNCONTROLLED WASTE SITES
AIR & HAZARDOUS MATERIALS DIV.
(C)
SEP - 3 1981

DATE: August 27, 1981

SUBJECT: Request for Exemption Under 40 CFR 1506.11 - Sylvester Hazardous Waste Site, Nashua, New Hampshire

FROM: Wallace E. Stickney, P.E., Director
Environmental Impact Office, Region I

Wallace E Stickney

TO: William N. Hedeman, Jr., Director
Office of Federal Activities (A-104)

Region I is requesting an exemption from the requirements of the National Environmental Policy Act (NEPA) under 40 CFR 1506.11 (Emergencies) and EPA's NEPA Rules and Regulations under 6.106 for the abatement of existing public health hazards at the Sylvester Hazardous Waste Site in Nashua, New Hampshire.

The site, which has been under study for some time, is located near a residential area including a near by trailer park. Residents from the area and state authorities are concerned about airborne health hazards, possible explosions and fire.

The site itself is an abandoned gravel pit where the waste has been dumped over a ten year period. The site has been fenced off and ten observation wells were installed to test for groundwater contamination. Results from samples show high levels of organic chemicals, iron and manganese in a plume traveling about one foot per day towards Lyle Reed Brook, which boarders the trailer park.

EPA and the State of New Hampshire have recently signed a cooperative agreement to implement the construction of treatment facilities on the site. Construction is expected to begin within several months.

Since the design of the remedial facilities is nearly completed, Region I believes that the application of NEPA would cause significant delay in an already existing emergency situation. Therefore, we request the exemption under the above referenced provisions of the CEQ and EPA NEPA Regulations.

I would appreciate your quick response to our request.

cc: Michael Cook, Director
Office of Emergency and Remedial Response
Doug Cohen (WH-548)
Office of Emergency and Remedial Response
John Hackler ✓
EPA, Region I
Mike Donohue,
NH Water Supply & Pollution Control

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (D)
WASHINGTON, D.C. 20460

SEP 16 1981

OFFICE OF THE ADMINISTRATOR

MEMORANDUM

SEP 21 1981

SUBJECT: Region I Request that the Superfund Remedial Action for the Sylvester Hazardous Waste Site, Nashua, New Hampshire Receive Special Consideration under NEPA

FROM: William N. Hedeman, Jr., Director
Office of Federal Activitics

TO: Wallace E. Stickney, P.E., Director
Environmental Impact Office, Region I

This is in response to your August 27, 1981 memorandum. Both OERR and OFA agree that the potential to create an emergency because of the release of hazardous waste from the Sylvester site is significant enough to qualify it for alternative National Environmental Policy Act (NEPA) arrangements under 40 CFR 1506.11 of the Council on Environmental Quality (CEQ) regulations.

You may, therefore, proceed with your plans for design of remedial facilities, along with the work under your cooperative agreement with the State of New Hampshire to implement construction of treatment facilities, without satisfying the procedural requirements of NEPA and the CEQ regulations. This exemption is granted with the understanding that whatever remedial actions that must be taken are carried out in the most environmentally safe manner possible.

If there any questions please contact Frank Rusincovitch of my staff on (FTS) 755-9368.

cc: Michael Cook (WH-548)

SEP 23 1981

The State of New Hampshire

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(E)
STAFF

WILLIAM A. HEALY, P.E.
Executive Director

DANIEL COLLINS, P.E.
Deputy Executive Director and
Chief Engineer

Water Supply and Pollution Control Commission
Hazen Drive — P.O. Box 95
Concord, N.H. 03301

June 9, 1982

UNCONTROLLED WASTE SITES
AIR & HAZARDOUS MATERIALS DIV.
1982
UNCONTROLLED WASTE SITES
AIR & HAZARDOUS MATERIALS DIV.
JUN 1 1982

Mr. John F. Zipeto
Office of Uncontrolled Sites
Air & Hazardous Materials Division
Environmental Protection Agency
John F. Kennedy Federal Building
Boston, Massachusetts 02203

Dear Mr. Zipeto:

This letter serves to confirm my telephone conversation with you on June 8, 1982. The State of New Hampshire has completed its review of the draft contract documents for the Gilson Road hazardous waste site slurry trench cut-off wall and cap project. GHR Engineering Corporation is prepared to incorporate the State's comments into the final containment design and provide the State with the final contract documents by June 10, 1982.

As you are aware, the State and Environmental Protection Agency are facing severe construction time constraints that require the completion of the containment project before the onset of freezing weather. In light of this requirement, it is my understanding the Environmental Protection Agency is reviewing the draft containment contract documents and will contact the State by June 9, 1982 with any significant comments that would prevent the submittal of the final contract documents to the State and Environmental Protection Agency by June 10, 1982.

Should you feel it necessary to have State and Environmental Protection Agency representatives meet with Camp, Dresser & McKee to clarify any design questions, please call this office immediately. Likewise, we would be happy to have our engineers attend any meetings with your office for the purpose of expediting this project.

Should you have any questions on this matter, please contact me at 271-2229.

Sincerely,

Tom Roy

Thomas E. Roy, P.E.
State On-Scene Coordinator

TER/bb
cc: Mr. Carl L. Eidam, Jr.
Mr. Michael P. Donahue, P.E.

(F) 99

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173

File: Nashua

June 23, 1982

UNCONTROLLED WASTE SITES
AIR & HAZARDOUS MATERIALS DIV.
JUL 6 1982

Mr. Michael Donohue
State of New Hampshire
WS&PCC
Hazen Drive - P.O. Box 95
Concord, NH 03301

REF: Final Feasibility Report on Gilson Road Hazardous Waste Site, Nashua, NH

Dear Mr. Donohue:

I have reviewed the subject report prepared by Roy F. Weston as a special condition of the existing cooperative agreement on the Gilson Road Hazardous Waste Site. Based on this review, I approve the report in its entirety.

The additional investigations of optimal cost-effective flow rates will be separately reviewed, as these are new requirements outside of the original scope of work for this report.

Sincerely,

Carl L. Eidam
Project Officer

cc: Merrill Hohman, EPA Region I
John Zipeto, EPA Region I ✓
Kitty Taimi, HSCD, EPA Headquarters

(G)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173

File: Nashua

UNCONTROLLED WASTE SITES
AIR & HAZARDOUS MATERIALS DIV.
JUL 6 1982

June 30, 1982

Mr. Michael Donohue
State of New Hampshire
WS&PCC
Hazen Drive - P.O. Box 95
Concord, NH 03301

REF: Groundwater Treatment Pilot Studies at Gilson Road Hazardous Waste Site, Nashua, New Hamsphire

Dear Mr. Donohue:

I have reviewed the draft plan of study for the subject pilot treatment plant and based on this review, approve the plan of study in its entirety.

In developing the actual experimental design for Task IV - Pilot Plant Experimental Runs, consideration must be given to determining the need for biological treatment as a part of the process train. The original Weston Report indicated a reduction in extractable organics through the metals precipitation/air stripper units. While the reductions noted in the original report were not large enough to preclude the need for biological treatment, variable inputs during the pilot plant studies may alter this conclusion. In any event, I would like to see the whole issue of the need for biological treatment as it relates to removal efficiences of the front end of the process train finalized as a part of this study.

If you have any questions or comments, please contact me.

Sincerely,

Carl L. Eidam
Project Officer

cc: Merrill Hohman, Superfund Coordinator, EPA Region I
John Zipeto, EPA Region I ✓
Kitty Taimi, HSCD, EPA Headquarters

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173

(H)

File - Nashua

June 30, 1982

UNCONTROLLED WASTE SITES
AIR & HAZARDOUS MATERIALS DIV.
JUL 6 1982

Mr. Michael Donohue
State of New Hampshire
WS&PCC
Hazen Drive - P.O. Box 95
Concord, NH 03301

REF: Review of Final Documents, Plans, and Specifications for Cap and Containment Wall Construction at the Sylvester Hazardous Waste Site, Gilson Road, Nashua, New Hampshire

Dear Mr. Donohue:

I have reviewed the subject documents pertaining to the Gilson Road Hazardous Waste Site, Nashua, New Hampshire. Based on this review, the documents are conditionally approved, provided that the following changes/additions are made:

1. Page 306-27, Section 3.70 - The protection and allowance for continued operation of the existing groundwater recirculation system is inadequately addressed in this section. It would be better addressed in Section 300 - Execution of Work and should specifically identify the components of the system that require protection (i.e. interceptor wells, piping and manifolds, recharge trench, and control center/office trailer). Protection should include provisions for continuous vehicular access to these areas to allow for normal maintenance and should specify that power interruptions to the system necessitated by pole relocation must be minimized.

2. Page 306-17, Section 3.10 - The construction sequence specified in this section (i.e. starting cutoff wall at G2-14 and proceeding counter-clockwise) is inconsistent with the construction sequence in the callout on drawing no. SG-2 (from G2-12 clockwise). The sequence should be as specified in Section 3.10.

If you have any questions or comments regarding the above, please call me at my office.

Sincerely,

Carl L. Eidam
Project Officer

cc: Merrill Hohman, EPA Region I
John Zipeto, EPA Region I ✓
Kitty Taimi, HSCD, EPA Headquarters